

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-10-470
Relating to Certification of New Heavy-Duty Motor Vehicle Engines

FORD MOTOR COMPANY

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102 and 43103 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-3;

IT IS ORDERED AND RESOLVED: That the following Ford Motor Company 1990 model-year diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

| <u>Engine Family</u> | <u>Displacement Liters (Cubic Inches)</u> | <u>Exhaust Emission Control Systems (Special Features)</u> |
|----------------------|---|--|
| LFM07.8FPK9 | 7.8/6.6 (474/401) | (Turbocharger) (Charge Air Cooler) |

Engine models and codes are listed on attachments.

The following are the certification emission standards for these engine families:

| <u>Hydrocarbons gm/bhp-hr</u> | <u>Carbon Monoxide gm/bhp-hr</u> | <u>Nitrogen Oxides gm/bhp-hr</u> | <u>Particulates gm/bhp-hr</u> |
|-----------------------------------|--|--------------------------------------|-----------------------------------|
| 1.3 | 15.5 | 6.0 | 0.60 |

The following are the certification emission values for these engine families:

| <u>Engine Family</u> | <u>Hydrocarbons gm/bhp-hr</u> | <u>Carbon Monoxide gm/bhp-hr</u> | <u>Nitrogen Oxides gm/bhp-hr</u> | <u>Particulates gm/bhp-hr</u> |
|----------------------|-----------------------------------|--|--------------------------------------|-----------------------------------|
| LFM07.8FPK9 | 0.5 | 1.9 | 5.1 | 0.30 |

BE IT FURTHER RESOLVED: That the Executive Officer has been provided all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Health and Safety Code Section 43205.5 and Title 13, California Code of Regulations, Section 2036).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachments.

Executed at El Monte, California this 26th day of September, 1990.



R. B. Summerfield
Assistant Division Chief
Mobile Source Division

1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINES

E.O. # A-10-470

Manufacturer Ford Motor Company Engine Family LFM07.8FPK9

Liter (CID) 7.8L (474 CID), 6.6L (401 CID) Eng. Type I6

Emission Control Sys. (Special Features) (TC, CAC)

| Engine Code | Fuel Injection Pump (9A543) (mfr/PN) | Fuel Injector (9F593) (mfr/PN) | Maximum Rated HP at RPM | Fuel Flow @ Rated HP (cmm/stroke) | Maximum Rated Torque at RPM | Fuel Flow @ Max Torque Speed (cmm/stroke) |
|-------------|--|--------------------------------------|-------------------------|--------------------------------------|-----------------------------|--|
| 0-80B-R00 | E9HN-RA | E9HN-EB | 170 @ 2600 | 88 | 412 @ 1700 | 86 |
| 0-80A-R00 | E9HN-SA | E9HN-EB | 185 @ 2400 | 97 | 474 @ 1500 | 101 |
| 0-85H-R00 | E9HN-KA | E9HN-BA | 190 @ 2300 | 106 | 520 @ 1500 | 110 |
| 0-85G-R00 | E9HN-LA | E9HN-CA | 210 @ 2300 | 114 | 600 @ 1500 | 127 |
| 0-85F-R00 | E9HN-PA | E9HN-CA | 215 @ 2000 | 124 | 740 @ 1500 | 150 |
| 0-85E-R00 | E9HN-NA | E9HN-CA | 225 @ 2300 | 122 | 605 @ 1500 | 128 |
| 0-85D-R00 | E9HN-MA | E9HN-DA | 240 @ 2300 | 129 | 660 @ 1500 | 134 |
| 0-85C-R00 | E9HN-TA | E9HN-HA | 270 @ 2300 | 144 | 740 @ 1500 | 149 |

Engine Family: L7.8PK9

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Date of Issue: 8-20-90
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